

Listing of Claims:

Claim 1 (currently amended): A system for making measurements in a wellbore and communicating data representing the measurements to the surface comprising:

a sensor; and

a housing comprising a plurality of separable passive data receptors to which data acquired by the sensor is transferred, and which are releasable in the wellbore, after data transfer, from the housing.

Claim 2 (previously presented): A system according to claim 1, wherein the sensor is electrically connected to an electronic memory within the passive data receptor which stores the acquired data, the electrical connection being broken prior to or during release of the passive data receptor from the housing.

Claim 3 (previously presented): A system according to claim 1, wherein the sensing apparatus further comprises an actuable port, openable to release the separable passive data receptors.

Claim 4 (previously presented): A system according to claim 2, wherein the separable passive data receptors each comprise a rigid casing with a sealable aperture, the casing surrounding the electronic memory and the electrical connection passing through the sealable aperture.

Claim 5 (previously presented): A system according to claim 4, wherein the sealable aperture is formed by an aperture surrounded by a sealing material, with the sealing material being heat treatable within the housing so as to provide after the electrical connection is broken a fluid-tight seal which is continuous with the surface of the rigid casing.

Claim 6 (previously presented): A system according to claim 1, wherein the passive data receptors are spherical.

Claim 7 (previously presented): A system according to claim 6, wherein each passive data receptor comprises two hollow metal hemi-spheres, joined by a plastics seal to form a sphere.

Claim 8 (previously presented): A system according to claim 1, wherein the housing and outer casings of the passive data receptors are formed from plastics material or metal.

Claim 9 (previously presented): A system according to claim 1, wherein the passive data receptors are configured to be either neutrally buoyant or buoyant, in relation to fluids within the wellbore.

Claim 10 (previously presented): A system according to claim 1, wherein the passive data receptors have a diameter in the range of 1 to 10cm.

Claim 11 (previously presented): A system according to claim 1, wherein the passive data receptors have a diameter in the range 1 to 5cm.

Claim 12 (previously presented): A system according to claim 1, wherein the data is encrypted prior to transfer to the passive data receptors.

Claim 13 (withdrawn): A method of acquiring data from downhole, comprising the steps of:

placing downhole a system comprising a sensor and a number of separable passive data receptors;

making measurements using the sensor;

transferring data representing the measurements to the passive data receptors; and

releasing the passive data receptors to carry the data from downhole to the surface.

Claim 14 (cancelled).

Claim 15 (previously presented): A system according to claim 1 wherein the sensor is located within the housing and the sensor is adapted make measurements while the housing descends into the wellbore.

Claim 16 (previously presented): A system according to claim 15 wherein the housing is a robotic logging device.

Claim 17 (previously presented): A system according to claim 16 wherein the robotic logging device is autonomously powered.

Claim 18 (previously presented): A system according to claim 15 wherein the housing is attached to a wireline.

Claim 19 (withdrawn) A robotic device for communicating measurements taken in a wellbore, comprising:

- a body having a propeller and electrical components; and
- a plurality of batteries that supply electrical energy used to power the propeller.

If the Examiner has any questions or believes that a discussion with Applicant's attorney would expedite prosecution, the Examiner is invited and encouraged to contact the undersigned at the telephone number provided below. Applicant believes that no fees are due. However, in the event that a fee or credit is owed or due, the Commissioner is authorized to charge or credit any deficiency/over-payment to Deposit Account No. 19-0615.

Respectfully submitted,

By: 

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